BRIDGING VISION AND PROGRAM DECISIONS

Sea Power 21 *began the process of translating theory into practice for a wide range of advanced naval concepts and technologies. The constitution of this process will ultimately increase the warfighting effectiveness of the joint force. We are moving forward with the fundamental concepts of Sea Strike, Sea Shield, and Sea Basing to transform the way we fight. To do so requires constant review and support and means that each of our five priorities is rigorously examined to guide our key decisions. They are:*

* Manpower
* Current Readiness
* Future Readiness
* Quality of Service
* Organizational Alignment

The CNO's annual Guidance and these priorities provide the links between vision and strategy in a broad sense, and more specifically between the Independent Capability Analysis and Assessment (ICAA) and the CNO's Investment Strategy Options (ISO). Associated with this is the Naval Capabilities Development Process (NCDP), which places decisions within a capability-focused context. To address our emerging naval operating concepts and the technologies, systems, and future platforms that will be used in the broader range of roles, missions, and tasks, we rely on the work of Navy Warfare Development Command (NWDC). NWDC reports to the Commander, Fleet Forces Command, in Norfolk, Virginia. In addition, the Navy's Fleet Battle Experiments (FBEs), which began in 1997, and have proven to be excellent vehicles for innovation and change will continue to be a vital element in our Sea Trial initiatives, as articulated in Sea Power 21.

FLEET BATTLE EXPERIMENTS

The Navy's FBEs examine innovative warfighting concepts and emerging technologies and systems. They are true operational experiments in which failure is an option; there is important value in learning concepts that do not work. The service has conducted 11 FBEs through 2004.

Fleet Battle Experiment Alpha (FBE-A), conducted March 1997, used a special, sea-based Marine Air-Ground Task Force (MAGTF) that employed advanced technology and conducted dispersed operations on a distributed, non-contiguous battlefield.

Fleet Battle Experiment Bravo (FBE-B), conducted September 1997, focused on the joint fires coordination process known as "Ring of Fire" and the Joint Task Force targeting process for Global Positioning System(GPS)-guided munitions, including a supporting command-and-control (C2) architecture known as "Silent Fury."

Fleet Battle Experiment Charlie (FBE-C) conducted April and May 1998, during the USS *Eisenhower* (CVN-69) CVBG Joint Task Force Exercise, and addressed the Area Air Defense Commander and "Ring of Fire" concepts, in addition to the development of a Single Integrated Air Picture and air-missile engagements across a large area of operations.

Fleet Battle Experiment Delta (FBE-D), conducted October and November 1998 in conjunction with Foal Eagle '98, an annual exercise sponsored by Combined Forces Command Korea, focused on four warfighting priorities: joint counter fire, joint counter special operations, joint theater and air missile defense, and amphibious operations.

NAVY PROGRAM ASSESSMENT AND PLANNING

Navy program assessment and planning documents and processes are developed in conjunction with the Defense Secretary's "Defense Planning Guidance" and, internal to the Department of the Navy, with the Secretary of the Navy's annual "Planning Guidance". Such top-level guidance focuses on required capabilities instead of specific threat assessments, using a capabilities-based planning process to ensure that readiness, operational availability, and warfighting requirements are satisfied in the most efficient and effective manner possible to meet persistent and emerging strategic challenges:

> *Traditional threats*

> *Irregular threats*

> *Disruptive threats*

> *Catastrophic threats*

To facilitate the capabilities-based planning process, the Deputy Chief of Naval Operations (DCNO) for Information, Plans, and Strategy (N3/N5) works with the Marine Corps to develop a prioritized list of warfighting capabilities based on the *Sea Power 21* construct. This list devolves the four Naval Capability Pillars (NCPs) of *Sea Power 21* (Sea Strike, Sea Shield, Sea Basing, and FORCEnet) into more detailed Mission Capability Packages (MCPs), which are further refined into listings of specific enabling capabilities developed collaboratively by the Navy and Marine Corps. A panel of flag and general officers, who represent the various mission and warfare areas, then subjectively evaluates the list of capabilities. This panel-chosen for recent operational experience-employs an iterative process to compare capabilities and determine rank-order priority to the warfighter, based on expected mission requirements in the future. The result is a list of prioritized capabilities that is tied directly to the NCPs and provides the Naval Capabilities Development Process (NCDP) with more input for determining the types and numbers of platforms entered into the program. This input complements the adequacy assessments that are conducted as part of the NCDP by the Director, Integrated Warfare Division (N70).

PLANNING AND PROGRAMMING

Innovation and transformation have characterized the Navy's program-planning process throughout the service's history, but neither received the level of emphasis they have in the past five years. In May 2003, through Management Initiative Decision (MID) 913, the Navy modified the Department of Defense (DoD) Planning, Programming, and Budgeting System (PPBS). This revised process, known as the Planning, Programming, Budgeting, and Execution (PPBE) process, was designed to improve the overall effectiveness of the process. The PPBE process

directly links strategy to programmatic decisions through a single organization responsible for analysis of warfare capabilities, while also adding additional emphasis to program execution. The Prioritized *Sea Power 21* Warfighting Capabilities List provides a framework to establish the capability roadmaps developed by the NCDP. This new planning process is now helping us ensure program synchronization, balance, and integration across all naval warfare areas, while remaining within fiscal constraints.

The result of this process becomes the Navy's input to the Defense Department's Program Objective Memorandum and, ultimately, the President's budget submission to Congress.

OPNAV ORGANIZATIONAL ALIGNMENT

Organizational speed and agility are necessary both to counter risks to our future military preeminence and to take advantage of new opportunities. Rapid technological change means we must be able to insert quickly new technology, at reasonable cost, into our forces, systems, and processes.

The Navy continues to function in a fiscally constrained environment, particularly as the scope and commitments of the Global War on Terrorism have yet to be determined. Thus, we must maximize our resources and ensure a high rate of return on our investments. For the Navy, "organizational alignment" means that our organizations, systems, and processes must deliver exactly what they are designed to produce: a combat-capable Navy ready to sail in harm's way and achieve mission success. We can do that only if all Navy organizations are properly

FLEET BATTLE EXPERIMENTS

Fleet Battle Experiment Echo (FBE-E), conducted March 1999, employed both real and simulated forces-and future concepts for command, coordination, communications, fires, and sensors-to address innovative operational concepts for defeating asymmetric threats, precision engagement, network-centric submarine warfare, information superiority, and casualty management.

Fleet Battle Experiment Foxtrot (FBE-F), a joint and combined exercise in the Arabian Gulf conducted November and December 1999, examined the concept of assured joint maritime access in protecting air and sea lines of communication.

Fleet Battle Experiment Golf (FBE-G), conducted April 2000, assessed emerging technologies in a network-centric, joint and combined forces environment to support theater ballistic missile defense and time-critical targeting in the Mediterranean theater.
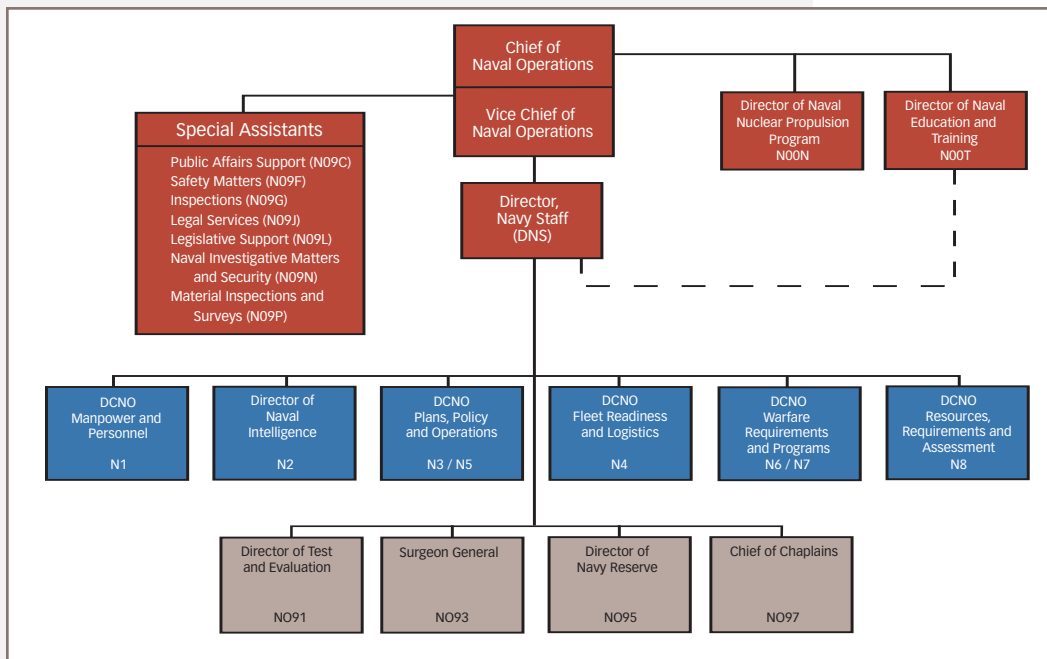

Figure 2 - OPNAV Organization

FLEET BATTLE EXPERIMENTS

Fleet Battle Experiment Hotel (FBE-H), conducted August and September 2000, focused on the application of network-centric operations in gaining and sustaining access in support of follow-on joint operations.

Fleet Battle Experiment India (FBE-I), conducted in the San Diego operational area June 2002, had the principal goal of operationalizing net-centric warfare. FBE-I tested a netted C4ISR architecture that provided participating joint forces with wide-area connectivity, enhanced bandwidth, and "reachback" for enhanced situational awareness and decision-making.

Fleet Battle Experiment Juliet (FBE-J), conducted July and August 2002, developed and refined command and control processes for future joint maritime forces. This included defining in detail the functions and planning process for the Joint Forces Maritime Component Commander, improving ship-based command and control, and enhancing the integration of networks and databases serving forward sea-based forces, as well as those in the rear.

Fleet Battle Experiment Kilo (FBE-K), a joint warfighting exercise including both live field forces and computer simulation, was conducted April and May 2003 in various locations around the United State and the 7th Fleet Pacific area of operations. The experiment, conducted concurrently with Exercise Tandem Thrust 2003, developed and refined processes supporting joint command and control from the sea, which will be used in future operations. There were a total of 11 transformational initiatives within FBE-K, all designed to combine experimental tactics, techniques, and procedures (TTP) with new technologies or existing technologies used innovatively.

aligned to achieve our overall objectives. To that end, the CNO initiated an alignment within the Navy's headquarters organization—OPNAV— to ensure proper focus on manpower and personnel requirements, as well as on current and future readiness. OPNAV continues to support the demands of our *Sea Power 21* strategy. (Figure 2 shows the current OPNAV organization.)

These changes have created strong advocacy for fleet readiness, consolidated fleet-readiness requirements, established increased visibility into warfare programs, improved integration of the Director for Training function into the Navy staff, and provided a new decision-making process. The establishment of the Deputy Chief of Naval Operations for Warfare Requirements and Programs (N6/N7) and a vice admiral reporting directly to the CNO, has consolidated management of naval and Navy-unique warfare programs and warfare-requirements generation within one office. This organization was formerly under the Deputy Chief of Naval Operations for Warfare Requirements, Resources, and Assessments (N8). Fleet readiness requirements and assessments are the responsibility of the Director, Material Readiness and Logistics (N4). Consequently realigning and refocusing the Deputy Chief of Naval Operations for Logistics to the Director, Material Readiness and Logistics, consolidates fleet readiness requirements and assessments in one office. The N4 organization is the "fleet's voice" within the OPNAV staff, more fully developing operational readiness requirements and assessing whether these requirements are being met throughout the Navy's resource-allocation process.

The alignment has also extended to current planning, programming, and policy offices on the OPNAV staff for the Navy's training programs to provide a stronger link between fleet training and readiness. This reorganization places responsibility for fleet and unit training requirements under the responsibility of the Director, Material Readiness and Logistics (N4). The former Director for Training organization (N6/N7) on the Navy staff has been integrated into N6/N7. The Chief of Naval Training and Education (N00T) is a vice admiral reporting directly to the CNO. This change has proved to be an important element in fulfilling the recommendations of the CNO's ongoing efforts of Task Force EXCEL (Excellence through Commitment to Education and Learning). In October 2004, we established the Assistant Chief of Naval Operations for Information Technology (ACNO-IT) to promote Navy-wide alignment between warfighting and business information technologies, and to ensure that IT investments and resources are targeted for highest value efforts and return on investment.

Two other organizations on the Navy staff combine to strengthen the decision-making process for major policy and resource-allo-

cation decisions. The CNO Forum is chaired by the CNO or VCNO and brings senior leaders from the Navy staff and the operating forces together as a "board of directors." The Forum's role is to advise the CNO and VCNO regarding decisions on key issues, as well as providing a clear and unambiguous record of CNO decisions and direction on those issues. To enable debate, evaluation, and validation of new and competing program and readiness requirements, the Navy Capabilities Board, chaired by the VCNO, serves to validate Navy requirements and provides the forum of preparation on Navy positions to debate issues in the Joint Requirements Oversight Council (JROC).

Our realignment efforts have not been limited to the OPNAV staff. We have created the Commander, Fleet Forces Command to integrate policies and requirements for manning, equipping, and training all fleet units. We created Fleet Type Commanders to lead their communities with one voice from the waterfront. We established the Commander, Naval Installations Command (CNI) to guide the operations, administration, and support for Navy installations worldwide, while reducing infrastructure management layers. CNI has developed a 25-year installation master plan, Navy Ashore Vision 2030, which supports Sea Enterprise, Sea Swap, the Integrated Global Presence and Basing Strategy, and the Fleet Response Plan (FRP). We have designated the Commander, Navy Education and Training Command as the Chief Learning Officer for the Navy and to be the single authority for individual training strategy and policy. We aligned research by the Office of Naval Research (ONR) to support priorities in expeditionary logistics, to prioritize science and technology investments, and to accelerate the transition of techologies from the laboratory to the fleet. We have also identified and acted upon areas for improvement in the integration of our total force, streamlining Reserve headquarters and increasing Reserve access to active platforms and equipment.

INDEPENDENT CAPABILITY ANALYSIS AND ASSESSMENT (ICAA)

A primary objective of the planning process is to develop a thorough understanding of how naval forces contribute to the nation's joint warfighting capabilities. In 1992, "...*From the Sea*" outlined four key operational capabilities: command, control, and surveillance; battlespace dominance; power projection; and force sustainment. These capabilities are required to execute operations in littorals. Today, the Navy's strategic planning guidance focuses on the overarching capability architectures that enable the projection of offensive and defensive naval power: Sea Strike, Sea Shield, and Sea Basing. These capability pillars are linked together by a seamless FORCEnet and carried out by carrier strike groups, expeditionary strike groups, expeditionary strike forces, and other naval forces under an FRP, by which the Navy carries

out U.S. national security and military strategy and policy. Within this conceptual architecture, the Navy's program planning process of the DCNO for Warfare Requirements, Resources, and Assessments (N8) relies on broad-based analyses that capture the complexity of naval warfare requirements, while balancing them within available resources.

Starting from the capability objectives, current and future technologies, systems, and platforms are assessed against their desired effectiveness in the joint-service environment, a process that addresses the balance and warfighting capability of the planned force structure and support areas. The analysis and review of the "health" of the individual warfare and warfare support capabilities is an ongoing, iterative process that is linked to the development of the Navy Program Objective Memorandum (POM) and Program Reviews (PRs).

WARFARE CAPABILITY ANALYSIS

> Sea Strike

> Sea Shield

> Sea Basing

> FORCEnet

The number of ships, submarines, and aircraft in the fleet is the most visible manifestation of the Navy's operational capabilities. The ICAA assist Navy leadership in matching available resources with desired capabilities in the near, mid, and far terms. In addition to the numbers and types of ships, submarines, surface and amphibious warships, mine countermeasures (MCM) vessels, aircraft, and special-purpose platforms, the ICAA considers force posture, lifecycle support, presence, and engagement requirements of the regional combatant commanders. Evolving threats, desired capabilities, developing technologies, doctrinal and operational concepts, and fiscal realities all play roles in shaping resource-allocation decisions leading to the naval forces that the United States actually deploys. Force structure analysis examines the resources required to recapitalize or modernize the force, develop alternative force structure paths and subsequent consequences of the tradeoffs, and frame relevant issues via integrated decision timelines.

Our capabilities-based approach selects and prioritizes the proper capabilities to ensure that strategic objectives can be satisfied in diverse future crises and conflicts, while simultaneously focusing on meeting current requirements. Driven by warfighting and combat needs, which include the flexibility to assure, dissuade, and deter, these capabilities must also support Joint Force Commanders and work with allied and coalition forces. The

capabilities must be fiscally affordable and provide a continuum of crisis-response and combat capabilities to support naval and regional combatant commanders, and national commitments. The force planning approach articulated in the Defense Strategy will guide decisions on the overall shape, size, and global posture of U.S. military forces to:

> *Defend the U.S. homeland and territory against direct attack;*

> *Operate in and from four forward regions to assure allies and friends, dissuade competitors, and deter and counter aggression and coercion;*

> *Surge globally to swiftly defeat adversaries in two overlapping focused military campaigns, while preserving for the president the option to call for a decisive defeat in one conclusive military campaign-including the possibility of regime change and occupation; and,*

> *Conduct a limited number of lesser contingencies.*

SEA STRIKE

The Sea Strike ICAA includes naval fires and amphibious warfare, the latter today more appropriately characterized as *Expeditionary Maneuver Warfare*. When naval fires are required, the Joint Task Force Commander will have a variety of naval weapons to choose from, including accurate standoff munitions delivered from aircraft, gun-fired precision-guided munitions, and sophisticated cruise missiles launched from surface warships and submarines. The essence of this capability is aircraft carriers, long-range attack aircraft, surface warships, and submarines that are capable of launching a variety of responsive, accurate, long-range precision weapons and providing robust Naval Fire Support (NFS).

In addition, the USS *Ohio* ballistic missile submarine, armed with the D5 missile system, provides the nation with the most survivable leg of the nuclear deterrence triad, thus making it a key element of the Navy's overall Sea Strike capabilities.

Expeditionary Maneuver Warfare includes the ability to mass overwhelming naval, joint, and allied military power, and deliver it ashore to influence, deter, contain, or defeat an aggressor. Naval expeditionary forces provide the Joint Task Force Commander with the ability to conduct military operations in an area of control, extending from the open ocean to the shore, and to those inland areas that can be attacked, supported, and defended directly from the sea. It is important to note that "littoral" operations are not "brown water" or "riverine." Today, littoral operations can commence hundreds of miles from an adversary's coast, as was clear in Operations Enduring Freedom and Iraqi Freedom. Soon, with warfighting enhancements in the fleet, the

Navy-Marine Corps team will be able to begin littoral operations more than 1,000 miles at sea. Navy and Marine Corps expeditionary forces-acting independently, jointly with the Army, Air Force, and Coast Guard, or combined with allied forces-provide the backbone of America's ability to project credible military power throughout the world, quickly and effectively.

SEA SHIELD

The Sea Shield ICAA focuses on naval warfighting capabilities required to project defensive power from the sea. It assesses emerging technologies designed to extend naval defensive fire-power far beyond the carrier strike group to dominate the sea and littoral battlespace, project defense deep overland against cruise and ballistic missile threats, and provide the U.S. with a sea-based theater and strategic defense. Sea Shield integrates the alignment of the Joint Full-Dimensional Protection and Strategic Deterrence Joint Warfare Capability Assessments with the Sea Shield capabilities inherent in *Sea Power 21*. In addition, Sea Shield enables the extension of homeland security to the fullest extent possible by including: intelligence, surveillance, and reconnaissance assets (ISR); surface ships, maritime patrol aircraft, and ballistic missile submarines; and, a mix of manned and unmanned systems operating on, above, and below the sea's surface.

Persistent supremacy of the sea and littoral battlespace continues to be at the heart of U.S. national strategy. Forward-deployed naval forces will assure access for the joint force through surface warfare and anti-submarine warfare (ASW), superiority, air supremacy, MCM, and the employment of naval mines in offensive and defensive operations. Next-generation naval mines, or Mobile Autonomous Undersea Weapons (MAUWs), linked to distributed and dispersed undersea FORCEnet sensors could provide critical defense of the Sea Base, in addition to more traditional concepts of barrier and area-denial operations.

Surface warfare superiority involves those actions necessary to neutralize an adversary's efforts to employ his surface warships against friendly forces. Anti-submarine warfare superiority includes capabilities that decisively neutralize or defeat an adversary's use of his submarines, thereby assuring access, permitting the use of the sea as a maneuver space, and allowing sea-based operations. Air superiority provides naval forces the capability of assured access to theater airspace by U.S. and coalition forces. Defensive Counter-Air (DCA) operations focus on maintaining air superiority with the capability to detect, identify, intercept, and destroy enemy air forces with aircraft or air-warfare-capable surface warships before they attack or penetrate the friendly air environment. Sea mining and offensive/defensive mine countermeasures include those capabilities used to employ mines against an adversary's forces or to neutralize an enemy's efforts to use mines

against U.S. or allied forces. Acting either independently or as a joint force component, naval forces provide capabilities that are critical to ensuring freedom of maneuver and power projection from the sea.

SEA BASING

The Sea Basing ICAA focuses on sealift, airlift, the Combat Logistics Force (CLF), transportation, and ordnance inventory. It includes the capability to move items both intra-theater and inter-theater. It also includes the overall health of the Navy ordnance inventory against combat, theater, and homeland security, and training requirements.

The specific naval surface and air logistics functions, which enable the movement and support of U.S. combat forces and other friendly forces afloat and ashore, remain areas of intense interest and are keys to successful Sea Basing capabilities. In combat operations in the Arabian Gulf—from Desert Shield/Desert Storm in 1990 to Operation Iraqi Freedom in 2004—sea lift transported 95 percent of all supplies and equipment to and from the area of operations. Limited access during Operation Enduring Freedom in Afghanistan in 2001-2002 was overcome by operations based and sustained from the sea. The Navy's strategic sealift fleet includes prepositioned, surge, and other support ships. Prepositioned ships include the Maritime Prepositioning Force (supporting the Marine Corps), Combat Prepositioning Force (supporting the Army), and Logistics Prepositioning Ships (supporting the Navy, Air Force, and Defense Logistics Agency). The surge fleet consists of Fast Sealift Ships (FSS), Large Medium-Speed Roll-On Roll-Off (LMSR) ships, and ships of the Maritime Administration's Ready Reserve Force (RRF). Other assets include hospital ships and aviation maintenance ships as well as commercial sealift assets if contracted to support specific mission requirements.

Prepositioned ships and surge sealift vessels directly support Marine Corps Assault Echelon and Assault Follow-On Echelon operations, as well as Naval Construction Battalion (Seabee) Force units. Sealift also carries Navy sustainment supplies and ammunition from storage sites to forward logistics bases, where the Navy's CLF shuttle ships pick up and deliver this material to combatant forces at sea. Likewise, sealift is vital to Army and Air Force regional operations, as the nation's land-based armed services are almost totally dependent upon the "steel bridge" of sealift ships to deliver everything a modern fighting force requires to accomplish its missions.

Sealift and the protection of in-transit ships by naval forces allow joint and allied forces to deploy and sustain operations, without

dependence upon shore-side infrastructure in forward areas. In the near future, sea-based logistics assets will increasingly support emerging concepts for operational maneuver and ship-to-objective maneuver—the essence of *Expeditionary Maneuver Warfare*—and provide a full-spectrum of logistics, command and control, communications, and offensive and defensive fires for Joint Force Commanders.

FORCEnet

The FORCEnet ICAA team assesses capabilities underpinning network-centric warfare, including communications and data networks; the common operational and tactical picture; and ISR concepts, systems, and programs. Many of these are key milestones on the Navy's transformational roadmap. FORCEnet capabilities are the key to the execution of effects-based operations, enabling the commander to achieve "Full Spectrum Dominance" over the enemy, exploit his weaknesses, and counter his strengths during rapid, decisive operations.

WARFARE SUPPORT ANALYSIS

> Infrastructure

> Manpower and Personnel

> Readiness

> Training and Education

INFRASTRUCTURE

While it seldom receives high visibility, infrastructure-which includes bases, facilities, training areas, ranges, laboratories, buildings, piers, hospitals, and the like-comprises the essential framework for naval force readiness at home and abroad. Although it is not essential that the Navy have access to overseas facilities to carry out its worldwide missions, having facilities at key forward locations provides logistics support benefits and facilitates rapid response to threats and contingencies. Unlike other services, however, the Navy has the ability to bring its immediate logistics sustainment capabilities to forward operating areas. Beyond the first 30 days of conflict, advanced logistics bases provide fuel, ammunition, and maintenance sustainment support. Ashore infrastructure includes land, buildings, structures, and utilities within ports and air stations, as well as repair and communication centers, storage and training areas, medical centers, and community support centers. This infrastructure is found at homeports as well as at advanced locations.

The Navy has a significant investment in installations—more than $110 billion in facilities replacement value in 2005. During the 1990s, this inventory did not downsize in similar proportions to the Navy's operating forces. Current facility sustainment and recapitalization rates are insufficient to maintain this infrastruc-

ture, much of which is inappropriate for 21ˢᵗ century needs. Age exacerbates this problem the average age of Navy buildings is more than 50 years, including numerous historical buildings maintained for heritage-preservation purposes. The Navy must shift its focus ashore from the current status quo to reshaping regional footprints and advanced logistics bases to ensure affordable, quality support for future naval operations.

Critical to sustaining readiness is our ability to train as we fight, through continued access to ranges and operational exercise areas (OPAREAS). Our military training ranges are national assets that allow our forces to train in a controlled, realistic, and safe environment. But our ranges and OPAREAS are increasingly surrounded by urban development and subject to increasing environmental challenges that have begun to affect the Navy's ability to execute realistic training. The Navy is therefore implementing a fully integrated, systematic strategy, which balances the dual goals of national security and environmental stewardship, at our training ranges and exercise areas.

Key to this training range sustainment effort is the Navy's commitment to the Tactical Training Theater Assessment Planning (TAP) initiative supported by the "At-Sea Policy" and the Navy doctrine publication "Environmental Protection" (NWP 4-11). With funding that started in FY 2004, the TAP initiative is providing a sound environmental range investment strategy for sustainable ranges/OPAREAS. This overarching sustainability program will seize the environmental high ground, ensuring effective stewardship of the Navy's ranges/OPAREAS and allow our forces to conduct realistic training in an environmentally sound manner. Accordingly, the Navy will continue to remain a good steward of the environment, while preserving the flexibility necessary for the Navy and Marine Corps to train and exercise ashore and at sea.

Infrastructure also includes shore capabilities necessary to support operational units, such as providing waterfront and air operations; ranges; shore force protection; community support, including housing, medical, child-care, and Morale, Welfare and Recreation (MWR) services; and readiness support, including shipyards and Naval Aviation Depots (NADEPs). Our challenge is to find ways to support an infrastructure that uses a smaller percentage of Navy resources, while maintaining acceptable Quality of Service for our Sailors and their families, and force-wide readiness. An additional round of Base-Realignment and Closure (BRAC) is underway in 2005, and the Navy is ready to shed excess and over-age infrastructure as one means of enhancing operational readiness and our Sailors' Quality of Service.

The Navy's logistics transformation vision is captured in our High-Yield Logistics Transformation strategy. This strategy seeks respon-

sive, timely, and high-quality support to forward-stationed forces throughout the world, while reducing the Navy's total ownership costs. The focus areas of this strategy are: optimization through best-value acquisitions; customer support and communication; process innovation; and, workforce productivity. The strategy has three overall objectives. The first is to ensure extraordinary support to the warfighter. The second is strategically to source infrastructure, maintenance, and service functions, as well as our supply inventory, so that it makes both operational and business sense. The third and final objective is to optimize resource effectiveness and reduce redundancy within our remaining infrastructure.

MANPOWER AND PERSONNEL

The Navy's members-active, Reserve and civilian-are the most essential element of our warfighting capability. Our capacity to provide sufficient operational forces and shore support, which will sustain a force structure with credible and responsive naval combat power, is indispensable to meeting the missions of the Navy. Among other things, we must address critical naval capabilities to support national strategic requirements for homeland security and defense, persistent "Presence with a Purpose" in forward areas, deterrence, prompt and assured crisis response, and warfighting. The personnel system must provide for the acquisition, development, retention, and management of the civilian and military workforce, including programs for recruiting, quality of life, community management, and distribution of personnel.

Finally, we must take human factors into account in the design, engineering, integration, and operation of our weapon systems and platforms. This focus on human-factors engineering and human-systems integration has implications for recruiting, training, compensation, detailing, and development of our Sailors' careers. The fundamental principle that will continue to shape our approach is "Mission First... Sailors Always." Moreover, our *Sea Power 21* vision demands a highly educated, experienced, and flexible force capable of using our technical advantage to successfully defeat our enemies. The critical bridge to the future is the Sea Warrior initiative, which seeks to maximize human capital through transformed manpower processes. Sea Warrior reinforces the Navy's commitment to the growth and development of its most valuable resource—people—and ensures mission success by delivering the right Sailors, at the right time, and to the right places.

READINESS

The 21st century's strategic environment requires that we increase the operational availability of our forces. We have to get to the fight faster to seize and retain the initiative. Every part of the fleet will be organized around a "surge" operational concept,

including our training, maintenance, and logistics processes. We are adapting our warfare doctrine, supporting procedures, training, and schedules to take best advantage of the FRP and other emerging constructs. Included in the readiness area are Navy operating funds, force operations, flying hour/steaming day programs, all levels of maintenance, spares, ordnance and fuel, and safety and survivability.

The Sea Enterprise initiative is the resource enabler for *Sea Power 21*. It provides a vehicle for harvesting resources for recapitalization. We are changing the way the Navy does business by finding innovative and less costly methods, while supporting the critical training, supply, and maintenance programs that are essential to readiness. By taking prudent risks and attacking costs, we will fund essential requirements and optimize the operational impact of today's Navy, while we create a future force that can rapidly field new technology and surge ahead to meet all new challenges.

TRAINING AND EDUCATION

Training and education capabilities are provided in four major functional categories: accessions, skills, professional development, and unit/force training. Programs include the staff, facilities, equipment, and services required for training. The objective of naval training and education programs is to efficiently and effectively deliver high-quality training and education, which provides a career-long continuum supporting Navy operational readiness and personal excellence.

NAVAL CAPABILITIES DEVELOPMENT PROCESS

The DCNO for Warfare Requirements and Programs (N6/N7) is the executive agent and lead for implementing the Naval Capabilities Development Process. Through the NCDP, the Navy has sharpened its focus on capability-driven warfighting requirements to enhance the ability to communicate a long-term warfighting vision that shapes research and development, procurement, force structure, and capabilities to counter threats and achieve mission success. The NCDP addresses requirements both within and beyond the current Future Years Defense Plan (FYDP) programming horizon. The process looks to establish an affordable long-range Naval Capability Plan and an Integrated Sponsor's Program Proposal (ISPP) for warfare systems that will meet the operational needs of the fleet and regional combatant commanders. Our goal is to develop integrated, executable, and realistic sponsors' resource allocation proposals that deliver the greatest degree of balanced warfighting capability within available resources. If resources are insufficient to deliver warfighting wholeness, the process will quantify the remaining risk and determine the unfunded priorities to mitigate it.

To support the NCDP process, the Navy established Warfare Sponsors within OPNAV who are responsible for developing Mission Capabilities Packages within the four naval capability pillars—Sea Strike, Sea Shield, Sea Basing, and FORCEnet—that cross and link platform-specific communities (e.g. Naval Aviation, Surface Warfare, and Mine Warfare) and coordinate the MCPs with resource sponsors, fleet commanders, and the acquisition community. Each of the naval capability pillars is supported by two or more MCPs, which serve as the primary mechanism to identify the current baselines of capabilities and to forecast capability evolution, thus, contributing to comprehensive planning and programming for integrated systems capabilities identified in Navy and joint-service strategies. Critical issues to be addressed include redundancy among systems, interoperability, cost and performance, and program schedule.

The four NCPs comprise all MCPs for each naval capability pillar and become the Navy's warfare investment strategy for programming operational capabilities. The Integrated Sponsor's Program Proposal, which merges the NCPs and resource-sponsor programming input, is approved by N6/N7 and presented to the DCNO for Resources, Warfare Requirements, and Assessments (N8), as a consolidated programming proposal that integrates all N6/N7 warfare areas within a specific Program Review or Program Objective Memorandum developed by N8.

NAVY PROGRAM IMPLEMENTATION

Even as the Navy continues its transformation to the capabilities and forces needed for the future, we must balance the costs of modernization and recapitalization for future readiness with the compelling need to maintain current readiness for missions and tasks that may arise at any time. This requires balancing recapitalization and modernization of aircraft, ships, submarines, and infrastructure with funding for today's operating forces, while providing a high Quality of Service for our Sailors and their families.

Based on previous experience, we know we must put in place the resources to attract, train, and retain the people we need for the future. That said, we must also ensure that our highly skilled and dedicated Sailors have the necessary tools for the complex and demanding jobs that lay ahead. The balancing of priorities and the requisite resource allocation decisions comprise the key portion of the Navy's programming and budgeting process. The result is a program that allocates resources to meet the Navy's highest priorities at some level of risk, as the critical needs are funded at the expense of lower-priority programs. These difficult decisions are based on intensive analysis, informed reviews, and critical projections constrained by the reality of limited resources.

QUALITY OF SERVICE

Quality of Service is a balanced combination of Quality of Life and Quality of Work. Ensuring a high Quality of Service for our Sailors, their families, and our civilian workforce is an essential element of the Navy's ability to attract and keep the best and brightest people, and it is a top priority in carrying out our mission. We are fostering innovation and support technologies that will enable our people to do their jobs more efficiently and effectively. The Navy's Human Capital Strategy will address the Quality of Service for all of our people.

QUALITY OF LIFE

Quality of Life programs are a vital part of our people's Quality of Service and are essential to our overall readiness and retention. Our wide variety of programs include those dealing with compensation, safety and health, medical care, (military accommodations both shore- and sea-based), recreation, and Personnel Tempo (PERSTEMPO) limits. They also encompass legal, chaplain, community, and family services that offer our Navy families deployment support, employment assistance, and, through programs like COMPASS, assist spouses in adjusting to the complexities of Navy life. Our Quality of Life programs are rooted in the awareness that although we recruit Sailors, we retain families.

QUALITY OF WORK

Our Sailors have chosen a lifestyle of service to their country. Recognizing this, we know we must offer them an excellent Quality of Work standard-meaningful work, the professional and personal tools to succeed, sufficient supplies, modern facilities, and a physical working environment that is not only important to our mission, but is also competitive with those offered by careers in private industry. Their work must be centered on honing their professional skills and enhancing mission effectiveness. A meaningful and satisfying Quality of Work standard is critical if we are to attract, develop, and retain a talented cadre of professionals. Our efforts this year will focus on development of a Human Capital Strategy, which includes the pursuit of new technologies and competitive personnel policies to streamline combat and non-combat personnel positions. We will also focus on improving the integration of active and Reserve missions, and reducing our total manpower structure. We will root out "make work" tasks and do away with work that is unfulfilling. We will enhance our diversity framework, and change policies and structures that inhibit the growth and development of our people. Our Human Capital Strategy will ensure that we can deliver the right skills, at the right time, for the right work.

Quality of Life and Quality of Work are indispensable elements of the Navy's ability to attract and retain the talented people we need for the 21st century. Both our current and future force readiness depend on them. Job satisfaction, ongoing professional growth, high-quality training and education, personal recognition, confidence in our promises to them and their families—all are integral to the Quality of Service we offer our people. Our Sailors must be confident that the tasks they take on will make a difference that is worth the personal sacrifices they make to serve their nation.

FORCE READINESS

Numbers do matter because quantity has a quality all its own. However, in the sensor-rich net-centric construct of 21st century operations, the numbers of platforms are no longer the sole meaningful measure of combat capability. The capabilities posture of the fleet is what is most important. Indeed, our Navy can deliver significantly more combat power, more quickly and accurately today than we could 20 years ago-when we had more ships and more people.

It has become evident that the current low rate of ship construction will constrain the future size of the fleet. Therefore, the Navy must invest in the right capabilities for the ships we are procuring in the future, and it must properly posture its forces to provide the speed and agility for seizing and retaining the initiative in any fight. The application of transformational new technologies, coupled with new manning concepts, including Sea Swap crew rotation and multi-crewing, and innovative distance-support concepts will enable us to attain the desired future combat capability with a force posture between 260 and 325 ships.

*Figure 3 - U.S. Navy Force Structure and Endstrength*
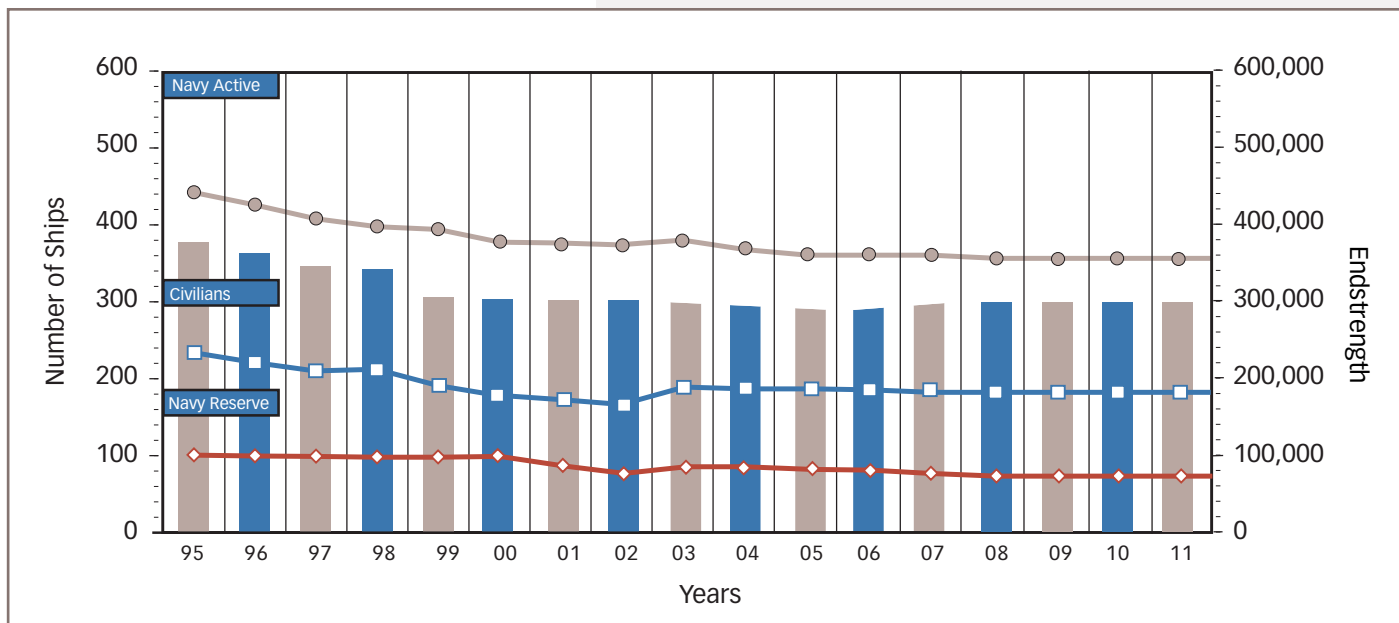
Since the changing global environment indicates that predictability is a liability, the Navy is introducing greater flexibility into its deployment patterns and formations. Variations on the traditional six-month deployments of Navy ships will decrease the force's predictability. These variations are being facilitated by use of longer-term deployments with Sea Swap crew rotation and forward homeporting of additional ships.

Nevertheless, our carrier strike groups, expeditionary strike groups, and surface action groups must be properly trained and equipped whenever they deploy. Even when combat or other contingencies do not occur, shortages can greatly compound the work required of our Sailors. Older equipment, kept operating beyond its intended service life, and shortages force the "cross-decking" of equipment, spares, supplies, and ordnance-and sometimes people, as well.

The ultimate requirement for Navy shipbuilding will be shaped by the potential of emerging technologies, the amount of forward Basing, and innovative manning concepts such as Sea Swap. For the first time in decades, we are building entirely new types of ships, with modular and open-architecture systems that will provide unprecedented flexibility and adaptability to fight in diverse environments against a variety of possible enemies. It also allows us to dramatically expand their growth potential with less technical and fiscal risk.

Figure 4 - Aircraft Carrier Build Schedule (Calendar Years)
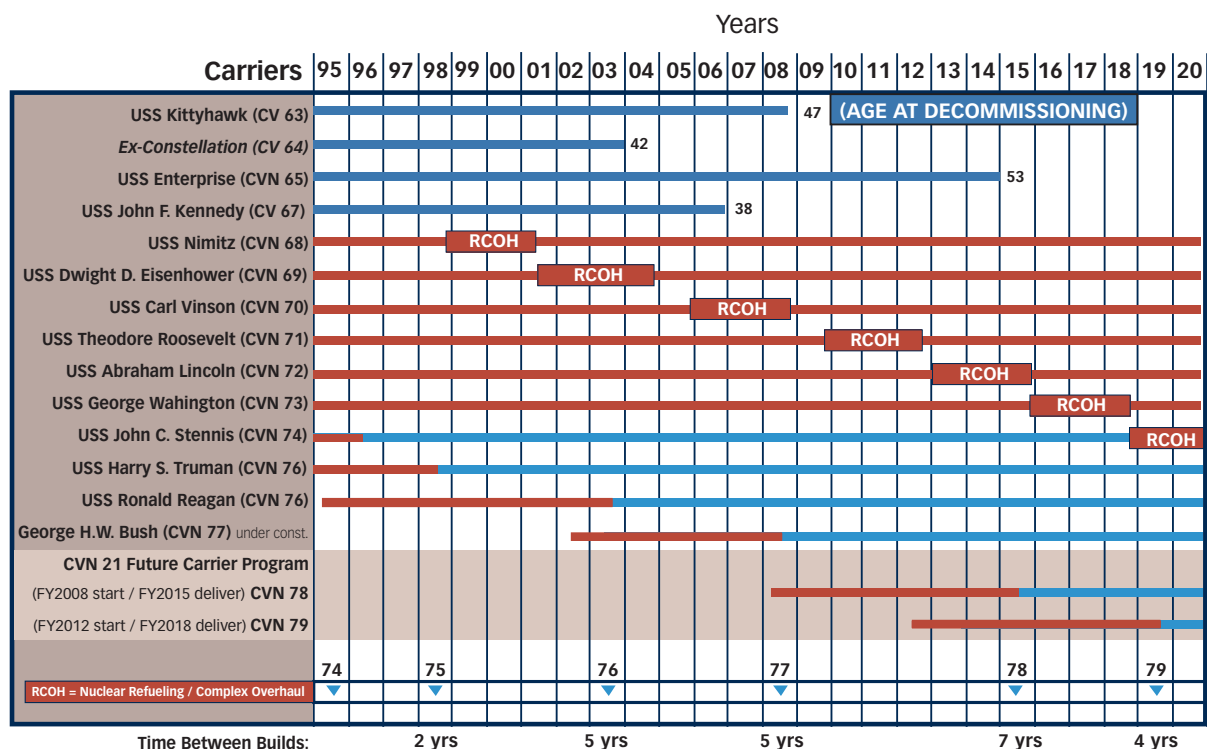
Aircraft carrier force structure studies since 1990 have assessed requirement levels between 10 and 15 driven by national strategy and the future global political climate. Since September 11, 2001 however, the Navy has postured its forces for the Global War on Terrorism and contingencies elsewhere in the world from minor threats to major theater war. Optimal flexibility and rapid turnaround became the order of the day. The FRP was created to reshape a force structure that is more agile and responsive, bringing combat power for regional combatant commanders in support of the National Military Strategy anyplace, anytime. FRP is supportable by an 11-carrier force. USS *John F. Kennedy* (CVN-67) was scheduled to undergo a Complex Overhaul (COH) in FY 2005; however, by selecting this ship for decommissioning, the Navy frees up resources for other top readiness priorities without sacrificing capabilities.

We are also growing critically short of certain "low-density/high-demand" (LD/HD) aircraft, particularly the EA-6B Prowler electronic-warfare (EW) aircraft. The demands of today's chronic-crisis and combat-threat environment, in which even minor countries can have sophisticated air defenses, drive the need for effective electronic warfare and suppression of enemy air defenses. The decision to retire the Air Force EF-111A Raven EW aircraft and to assign all DoD radar-jamming missions to the Prowler adds to the significance of the EA-6B in joint warfare. With its jamming and High-Speed Anti-Radiation Missile (HARM) capability, the Prowler provides capabilities to deny an adversary's use of radar and communications that are unmatched by any airborne platform worldwide. These capabilities were amply demonstrated during the 12-year enforcement of "no-fly" zones in Iraq and experiences in Operations Allied Force, Enduring Freedom, and Iraqi Freedom. Its proven effectiveness in combat underscored the Prowler's role as an indispensable element of coalition air operations. To meet future Airborne Electronic Attack (AEA) requirements, the EA-18G variant of the F/A-18 Hornet Strike Fighter will replace the Navy carrier-based EA-6B force with an Initial Operational Capability (IOC) in 2009.

An attack submarine force-level study, conducted by the Navy in 2002, identified 55 attack submarines as the minimum warfighting requirement to meet the 2001 Quadrennial Defense Review (QDR) force-sizing construct. The first *Virginia* (SSN-774)-class submarine was commissioned last year, as a replacement for the *Los Angeles* (SSN-688)-class attack submarine, and incorporates new capabilities, including unmanned vehicles and the ability to support special operations forces. The *Virginia* class will be an integral part of the joint, networked, dispersed 21st century fleet. The contract for the second submarine of the class was funded in FY 2005, and FY 2006 funding is being proposed for continued support of this multi-year contract. The Navy is also focused on

guided missile submarine conversion program with the first SSGN becoming operational in 2007. Our future SSGN capability will provide covert strike platforms, which are capable of carrying 154 Tomahawk missiles and have the capacity/capability to support special operations forces for an extended period-ultimately, enabling clandestine insertion and retrieval by lockout chamber, dry deck shelters, or the Advanced SEAL Delivery System (ASDS). These ships will be arrayed with a variety of unmanned vehicles to enhance the joint force commander's knowledge of the battlespace. The inherently large internal capacity of these submarines will enable us to leverage future payloads and sensors for years to come.

The Navy is transforming to provide naval and joint force commanders with a range of warfighting capabilities across the spectrum of warfare. Our surface combatant family of ships allows us to dramatically expand the growth potential of our surface combatants with less technical and fiscal risk. The Navy's future surface warships will be designed from their keels up to operate as critical elements of a forward-stationed, distributed, networked, joint force. We are developing the next-generation surface combatants as "sea frames"(analogous to "air frames") that are part of a modular system. We have decided upon three entirely new ship classes. The first to premier will be the Littoral Combat Ship (LCS) in 2007. The advanced, multi-mission guided missile and strike destroyer, DD(X), will follow around 2011. A few years later, the keel will be laid on the first CG(X)—the next class of cruiser designed specifically for theater air and ballistic missile defense.

To help meet near- and mid-term needs, the Navy is upgrading the in-service Aegis cruisers and destroyers with selected leading-edge technologies, some of which are being developed during the DD(X), CG(X), and LCS design and production processes. This will

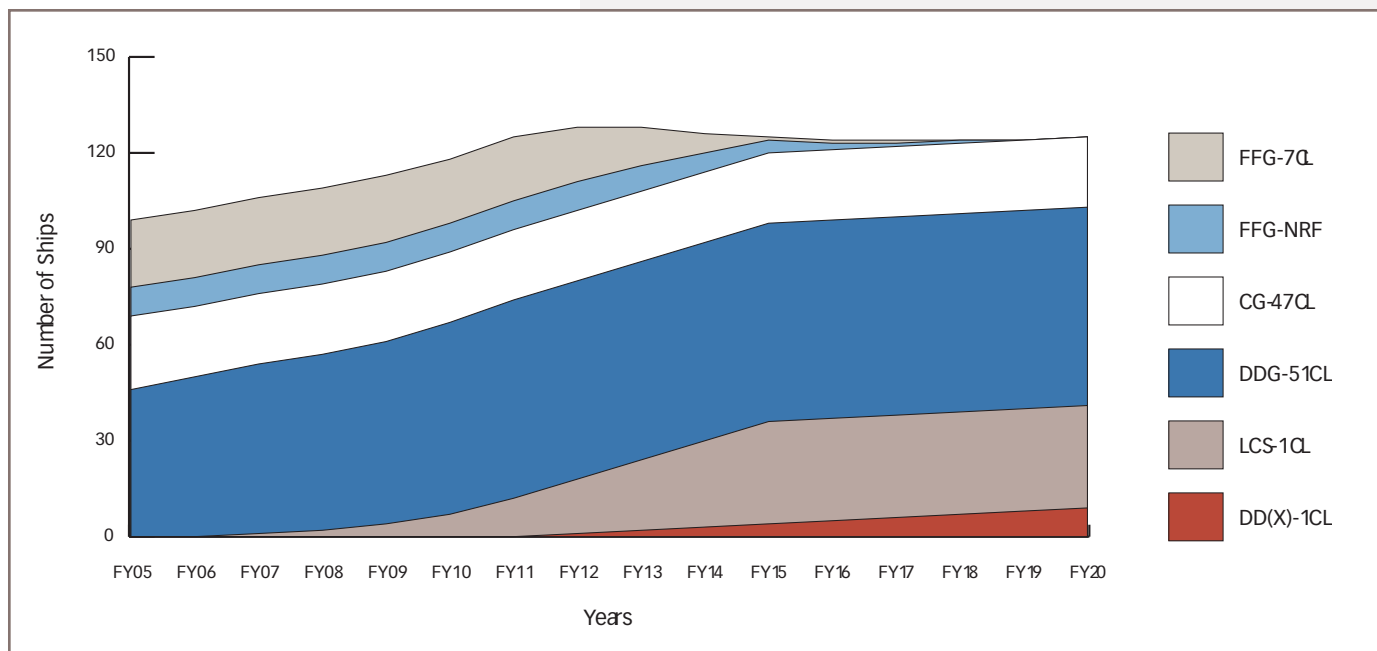*Figure 5 - Attack, Guided -Missle, Ballistic-Missle Submarines*
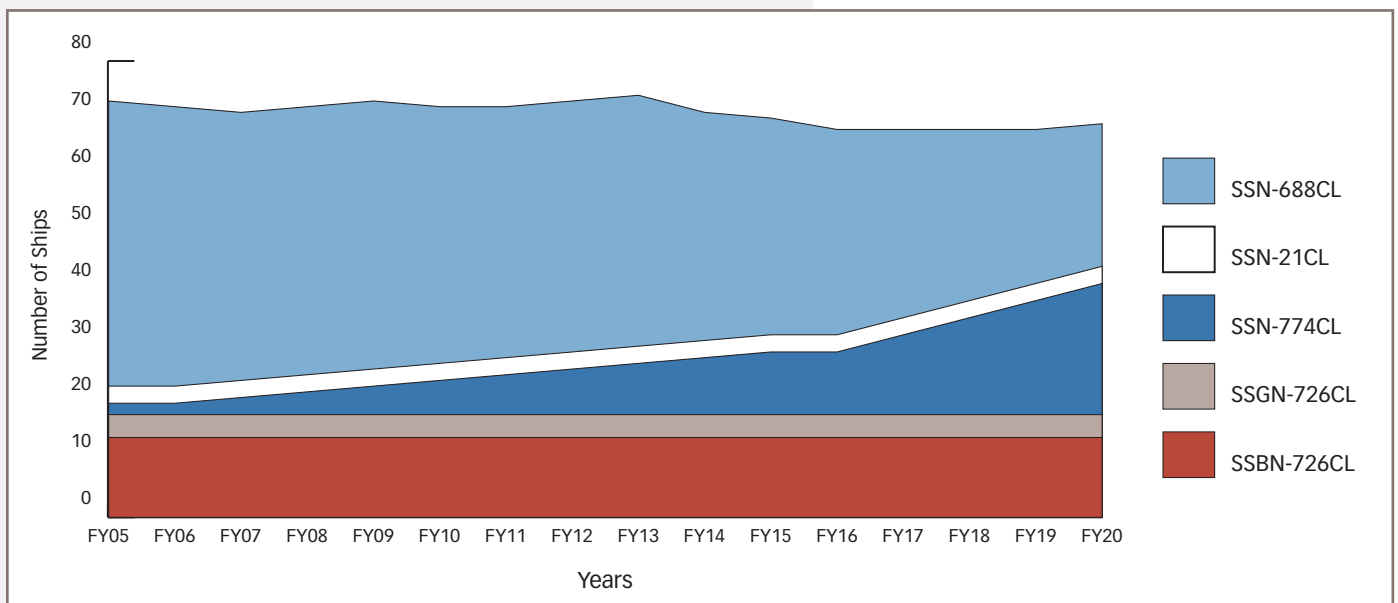
Figure 6 - Surface Warship Projections

ensure that this vital core of the multi-mission fleet will maintain operational effectiveness throughout their lifetimes and until the DD(X) and CG(X) programs come to fruition. The USS *Curtis Wilbur* (DDG-54), with an upgraded Aegis system, assumed a Long-Range Surveillance and Track role in late 2004, as part of the nation's ballistic missile defense system. Four other DDG-51s have also received this upgrade. Five more will be upgraded in 2005, and another five in 2006.

The Navy's remaining *Oliver Hazard Perry* (FFG-7)-class frigates are being modernized. Hull, mechanical, and electrical (HM&E) systems are being enhanced, and a limited combat-systems upgrade will improve their survivability in the littoral combat environment. Because of their high operational costs and limited room for combat system growth or modernization, the Navy has been decommissioning *Spruance* (DD-963)-class destroyers since 2002, with the final decommissioning to take place in 2006. Two *Spruance*-class ships are being reserved: one as a Self-Defense Test Ship and the other as a development hull for the DD(X) program.

We will continue to focus on the transformation of our amphibious warfare shipping—large-deck/aviation-capable amphibious assault ships, dock landing ships, and landing platform dock ships-to a force that can affordably meet future needs. Critical elements of our plan include the acquisition of *San Antonio* (LPD-17)-class amphibious platform docks, the design, engineering, and acquisition of the next-generation amphibious assault ship (LHA-R); and, modernization of in-service ships.
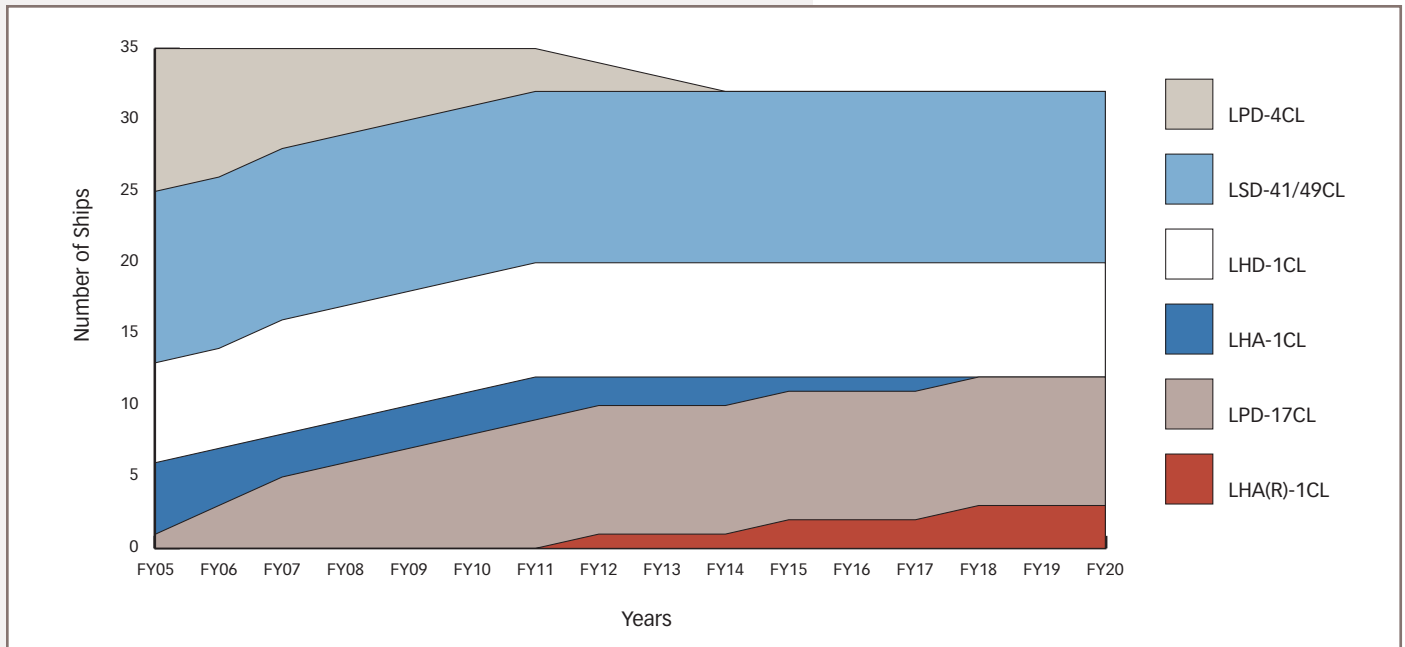
Figure 7 - Amphibious Ship Projections

The requirement for our amphibious warfare forces includes the capability to lift the assault echelon of 3.0 Marine Expeditionary Brigade (MEB) equivalents. This 3.0 MEB equivalent is the troops, aircraft, vehicles, equipment and cargo of a Marine Expeditionary Force (MEF), which is the primary Marine Air-Ground Task Force element organized to fight and win in conflicts ranging from smaller contingencies to regional war.

Our Combat Logistics Force has been well represented in Operations Enduring Freedom and Iraqi Freedom, and has provided outstanding service to the ships in the Mediterranean, Arabian Gulf, and Red Sea. To increase the peacetime availability of these ships, the last of the four Navy-manned supply (AOE-6) fast combat support ships recently transitioned to the Military Sealift Command. The *Lewis and Clark* (T-AKE) stores/ammunition ship program is on track for replacing the aging T-AFS and T-AE store ships-with a projected delivery date of the lead ship in January 2006. Also, the two remaining *Sacramento* fast combat support (AOE) ships are nearing the ends of their service lives and will be decommissioned within the year.

Mission accomplishment must always be our top priority, therefore, our focus on readiness must not waver. The FRP will support our nation's security needs with persistent naval capabilities that are both rotational and surgeable. The FRP accelerates the Navy's advantage in responding whenever and wherever the Commander in Chief needs our naval forces, and harnesses the Navy's enhanced speed and agility to ensure we can respond to a crisis with overpowering force.

CURRENT READINESS

On average, one-third of America's fleet is deployed every day, and we are focused on ensuring that deployed readiness remains high. We have made significant improvements these last few years in reducing major ship depot maintenance backlogs and aircraft depot-level repair back orders; improving aircraft engine spares; adding ship depot availabilities; ramping up ordnance and spare parts production; maintaining steady "mission capable" rates in deployed aircraft; fully funding aviation initial outfitting; and, investing in reliability improvements. In FY 2006, we continue to seek improved availability of non-deployed aircraft and the ability to meet our 100 percent deployed airframe goals.

Prior to 2001, naval aviation metrics were unreliable, inconsistent, and lacked a common language (sorties, parts, dollars, and the like;). There was limited predictability in parts requirements, full-mission-capable/mission-capable (FMC/MC) were used as readiness metrics. The focus supported near-term solutions, i.e., buying supplies and parts, vice integrating all support elements.

The solution became NAVRIIP in August 2001 when the CNO tasked the Commander, Naval Air Forces Pacific (CNAP) with the responsibility for overseeing the entire spectrum of naval aviation. This responsibility included implementing a comprehensive program to make fundamental process changes in the way the Navy provides manpower, equipment, and training to stateside naval aviation commands between deployments. Led by flag officers from 17 commands, NAVRIIP is defining and executing changes that will sustain near- and long-term aviation readiness goals. The primary goal is to achieve "cost-wise" readiness by balancing and aligning interactions between operational level maintenance, intermediate level maintenance, and the logistics infrastructure that supports them. In January 2004, the scope of NAVRIIP grew to include deployed units and the operational metric of cost-wise aircraft ready for tasking.

Continued military readiness depends on reliable access to all necessary training, testing, and operational exercise areas. Our forces should get their first experience with live arms before they engage in actual combat, a goal implicit in our philosophy of "train as you fight." Our military training ranges are national assets that allow our forces to train in a controlled, realistic, and safe environment. Urban encroachment, the obligations of environmental compliance on land and at sea, and concerns about noise and airspace congestion require a comprehensive approach to sustain access to training ranges. Inappropriately trained people perform poorly in combat and even increase risk in peacetime. Actions taken during the last three years have addressed critical Navy needs regarding encroachment and future training challenges. Readiness-specific changes to the Marine Mammal Protection Act (MMPA), Endan-

gered Species Act, and Migratory Bird Treaty Act have helped the Navy meet training and operational challenges. The Navy and Marine Corps will continue to demonstrate leadership in both their military readiness role and as an environmental steward of the oceans and the lands we on which we train. The Navy has initiated a comprehensive training range and operating area sustainment program to ensure continued access to ranges and operating areas. A Navy Range Office has been established within N4 (Director, Material Readiness and Logistics) to oversee this important effort.

The 21st century Navy's highly flexible and effective carrier strike groups, expeditionary strike groups, and expeditionary strike forces are designed to satisfy the requirements of the nation's security and military strategies. Coupled with independent operations by missile defense surface action groups and nuclear-powered guided missile/special operations submarines, our future fleet will dramatically increase the operational flexibility, global reach, and striking power of today's forces.

The funding we seek this year reflects the increasing capabilities and evolving operational concepts of our forces. After a thorough analysis, we noticed an operational flexibility and increased capability in the way that permitted the retirement of an older aircraft carrier without risk to national security. In addition, the cost avoidance of this action will increaase additional investment in transformational programs that further increase our capabilities. With the operational flexibility of the Navy's FRP which emphasizes our determination to sustain "Presence with a Purpose," we optimize our warfighting effectiveness.

FUTURE READINESS

Although sustaining current operational readiness is a top priority, maintaining aging equipment and infrastructure and modernizing our forces are growing concerns. The need to pay for current readiness must first be balanced with the imperatives to improve and ultimately replace the equipment we have in the fleet today. Modernization enables our current forces to continue to be valuable warfighting assets in the years ahead, while concurrently trying to mitigate escalating support costs of aging equipment. Also, as technological cycle times are now shorter than platform service life, it is fiscally prudent to modernize the force through timely upgrades, and, when it makes good operational and business sense to do so, to incorporate commercial open-source technologies and systems.

Adequate readiness can only be sustained in the future with modernization and recapitalization programs that deliver adequate numbers of technologically superior platforms and systems to the fleet. This has become a challenging task. The fleet is aging, and

there is real and growing tension between maintaining near-term readiness, while supporting future modernization and recapitalization. Our Sea Enterprise initiatives, under the auspices of *Sea Power 21,* will lower our cost of doing business so we can maintain near-term readiness and still invest more in the future.

Sustained future naval readiness begins with a recapitalization program that delivers the right number of technologically superior platforms and systems for the fleet. We therefore need to invest with a focused and expanded program to maintain naval superiority throughout the first half of the 21st century. The current low rate of ship construction and the resultant escalation of platform cost will constrain the future size of the fleet. It is imperative that we buy the correct kinds of capabilities in the future ships that we are procuring, and that we properly position our force to provide the speed and agility for seizing and retaining the initiative in any fight. The ultimate requirement for shipbuilding, however, will be shaped by the potential of emerging technologies, the amount of forward basing, and innovative manning concepts such as Sea Swap and optimal manning. Additional variables range from operational availability and force posture to survivability and war plan timelines.

The notional force-posture diagram (Figure 8) illustrates how manning concepts and anticipated technological adaptation will modify the number of ships required. The blue and yellow lines represent levels of combat capability and the ships required to achieve that capability. For example, the left side of the diagram shows our current number of ships (approximately 290) and the current projection of ships required to satisfy completely Global War on Terrorism requirements (260-325) in the future. The right side of the diagram shows a projection that provides the same combat capability but fully leverages technological advances with maximum use of

Figure 8 - Force Posture Ranges
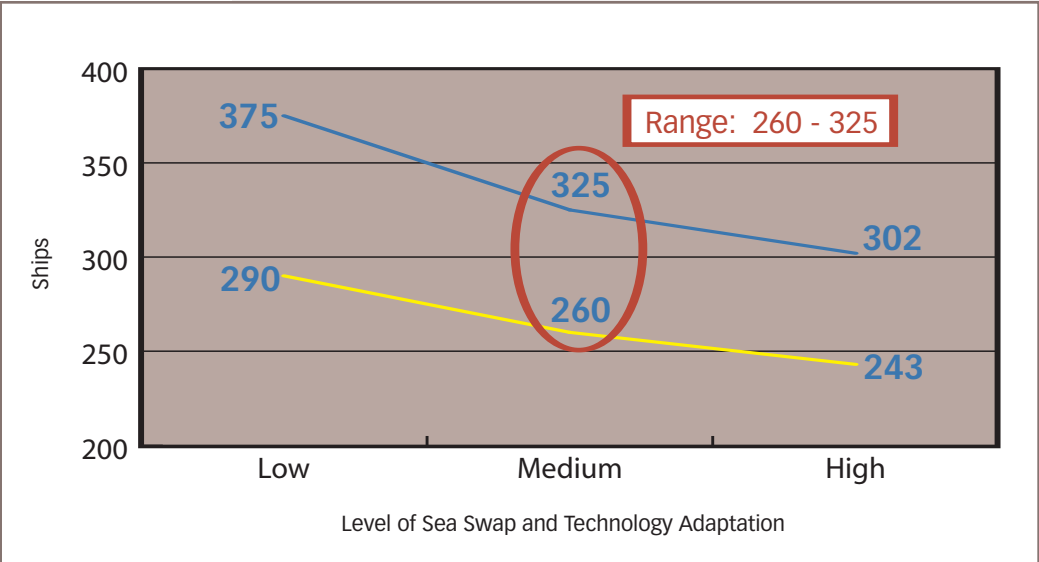
	FY05	FY06	FY07	FY08	FY09	FY10	FY11
F-35 Joint Strike Fighter	0	0	0	10	32	36	33
F/A-18E/F Super Hornet	42	38	30	24	20	22	14
EA-18G	0	4	12	18	22	20	14
E-2C/D Hawkeye	2	2	2	0	4	4	4
MH-60R Seahawk	6	12	25	25	30	30	31
MH-60S Seahawk	15	26	26	26	26	17	15
P-8A Maritime Multi-Mission Aircraft	0	0	0	0	0	6	8
Joint Aerial Common Sensor	0	0	0	0	1	4	5
KC-130J Hercules	4	12	0	0	0	0	0
MV-22 Osprey	8	9	14	19	30	35	38
VXX Executive Transport Helicopter	0	0	0	0	4	3	4
UH-1Y/AH-1Z Super Cobra/Huey	9	10	18	21	21	22	23
T-45 Goshawk	8	6	12	0	0	0	0
T-6A Texan II JPATS	0	0	24	48	48	48	48
C-40 Clipper	1	0	1	2	1	1	1
C-37A	1	0	0	0	0	0	1
Broad Area Maritime Surveillance UAV	0	0	0	0	0	0	4
VTUAV Firescout		0	3	5	7	11	11
USMC UAV Eagle Eye		0	1	2	3	0	0
F-5 TacAir Aggressor		9	5	0	0	0	0
Total	98	128	173	200	249	259	254

Figure 9 - FY2005 - 2011 Aircraft Procurement Plan

	FY05	FY06	FY07	FY08	FY09	FY10	FY11
CVN-21 Next-Generation Aircraft Carrier	0	0	0	1	0	0	0
SSN-774 *Virginia* Class	1	1	1	1	1	1	1
DDG-51 *Arleigh Burke* Class	3	0	0	0	0	0	0
DD(X) Next-Generation Destroyer	0	0	1	1	1	1	1
LPD-17 *San Antonio* Class	1	1	1	0	0	0	0
LHD/LHA(R) Amphibious Assault Ship	0	0	1	0	0	1	0
LCS Littoral Combat Ship	1	1	2	3	5	5	5
CG (X) Next Generation Cruiser	0	0	0	0	0	0	1
T-AOE(X) Next-Generation Combat Support Ship	0	0	0	0	1	1	2
T-AKE *Lewis and Clark Cargo*/Ammunition Ship	2	1	1	1	0	0	0
Maritime Prepositioning Force Future (MPF(F))	0	0	0	0	1	1	2
Total	7	4	7	8	9	10	12

Figure 10 - FY 2005 - 2011 Shipbuilding Plan

Sea Swap. It is a range of numbers because the degree of technological adaptation is a variable, as is the degree to which we can implement Sea Swap and other innovations. The middle portion of the curve (in the red ellipse) shows a projected range that assumes a less extensive projection of technological adaptation and use of Sea Swap. Although simplified, this diagram shows how the application of transformational new technologies coupled with new manning concepts will enable us to attain the desired future combat capability with a force posture between 260 and 325 ships.

The Navy has reinvigorated an aggressive effort to realign its shore establishment to free-up funds for future readiness and modernization of the operating forces. There are three primary components of this effort: the reduction of infrastructure costs and consolidation of redundant services and functions; the establishment of Navy-wide standards and metrics for all shore installation functions; and, the identification and implementation of best business practices, particularly under the Sea Enterprise initiative.

INVESTING IN FUTURE READINESS

The CNO's "Guidance for 2005" reemphasizes that *Sea Power 21* is the service's vision to deliver enhanced capabilities through new concepts, technologies, organizational initiatives, and improved acquisition processes. The future requires two primary attributes of the Navy: speed and agility. Speed and agility must also apply to the way we run the business of putting combat power to sea. This means expediting efforts to achieve true integration with our joint partners and to align more closely our requirements and procurement decision processes. And, we must reshape the technological and industrial bases to deliver the faster, more agile Navy we are becoming. While we have made important steps forward in Sea Enterprise, we have still more to do to generate the resources to implement the *Sea Power 21* vision. Innovation, elimination of unnecessary costs, and increasing efficiency and effectiveness will help us find those resources.

Our mobility, adaptability, variable visibility, and capabilities matched with our knowledge of the battlespace and immense firepower make the Navy an especially useful force for assuring U.S. security, at home and abroad. The challenges facing us today, and those emerging just over the horizon, confirm that ready, modern, and capable naval forces will remain vital to the nation's security, its interests, its citizens, and its friends. By balancing our present needs and future imperatives with the enhanced capabilities provided by technological and innovative advancements, we will bridge to the future of a transformed Navy.

Chapter Three provides summaries of the Navy's programs for our people, our sensor and weapon systems, our ships, aircraft, and submarines. Balanced against competing priorities within available resources, these programs set our course for the future, to ensure that the vision of *Sea Power 21* be realized.